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Migration and Gold Panning: Collaboration between Indigenous and Non-indigenous People in Artisanal Mining in Gaoua, Burkina Faso

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Abstract

Beyond its contrasting representations, gold panning became a major rural activity in many African countries. In Burkina Faso, it gathers thousands of people from different backgrounds, along with related activities. This gold panning-led migration towards the sites has a transformative effect on the rural environment through the new forms of relationships it creates between local indigenous community members and migrants. This observation and listening to the daily life of gold-panning sites suggest that Gaoua municipality, South-West Burkina Faso, is considered to be the country's leading gold-mining region. Through a qualitative study based on documentary research, semi-structured interviews, focus groups, and direct observations, this article analyzes the issues at stake in the cohabitation between these two social categories of people. Drawing on the sociology of migration and social change, the research findings highlight the role of collaborative migration as both a strategy for migrant integration and as a means for indigenous communities to acquire new knowledge in artisanal mining, thereby enhancing their ability to manage local mineral resources.

Keywords

Gold panning; Migration; Social change; Collaboration; Gaoua; Burkina Faso

Introduction

Southwestern Burkina Faso's population has a centuries-old tradition of artisanal gold mining (Kiethega, 1983; Père, 1988). This heritage of expertise and social representations of gold have changed over time, and as a result of the opening up of the Lobi region to its immediate and distant surroundings. The most significant changes can be seen in the mode of exploitation and the identities of those involved in the gold mining process. Since the

early 2000s, gold panning in the southwest region has become an activity that does not discriminate based on gender or age in the southwestern region. The accessibility has enabled opportunities for upward mobility; over time, some young people have progressed from crushing ore to becoming diggers, and eventually joined the small teams responsible for managing and selling mining revenues.

In addition to the transfer of skills through collaboration between non-natives and locals, the methods of exploitation are evolving due to the introduction of new, more efficient technologies (metal detectors, chemicals, etc.) such as metal detectors and chemical agents that enable gold prospectors to extract a greater amount of gold from residual soil compared to previous, decades. These innovations have significantly increased the productivity of gold miners, leading to an increase in their income (Sangaré, 2022). This increase in performance has triggered social change, marked by an unprecedented influx of residents to gold sites and a substantial arrival of migrants. The municipality of Gaoua, recognized nationally for its rich gold deposits, has become one of the biggest points of attraction in the South-West region. As a result, this region ranked second in Burkina Faso for the number of active gold panning sites, with 61 sites under exploitation as of February 2017 (INSD, 2017). While the region ranks second in terms of the number of sites, it ranks first in terms of artisanal gold production, with a total estimated value of 212 078 883.95 USD, or 4.7 tons of gold, representing half of the national artisanal gold production (INSD, 2017).

The appeal of gold mining is no longer selective as it once was. Indigenous communities, previously reluctant to engage in the sector due to cultural reasons had previously been reluctant to participate, are increasingly investing in it. Among them, gold panning is no longer an activity primarily reserved for women because of the sacredness of gold (Héritier, 1996); Lobi men are now entering the gold mining industry. Once considered sacred by the Lobi and Birifor peoples (Mégret, 2013; Werthmann, 2003), gold extraction has become a desirable occupation for men. The demystification of gold and its production process in this region can be attributed, on the one hand the introduction of modern gold panning by migrants from other parts of the country and, on the other, to the increasing involvement of indigenous men in the activity (Sawadogo, 2021). Today, a significant number of Lobi men, especially young engaged in gold mining and the broader precious metal sector.

These transformations have led to profound shifts in the local system of representation, as well as in relationships between Indigenous and migrant populations, subtly reshaped by the gradual opening of Lobi country to outsiders. Over time, these dynamics have also impacted the social structure, challenging certain cultural and religious values, including the social distribution of tasks in areas once governed by strict social norms. Reflecting this dynamic, Ouédraogo asserts that *"indigenous women are gradually losing control of their activity to migrant gold miners who have arrived with new techniques enabling them to exploit vein deposits. Vein gold mining is becoming more visible than alluvial and eluvial gold mining"* (Ouédraogo, 2020). It is worth noting that alongside migrants, local men are massively joining gold panning sites. This shift allows us to consider gold panning as a symbolic link between a past rooted in tradition and sacred values and a future driven by the power of money and the pursuit of wealth (Sangaré, 2022). Gold mining work strongly attracts young Lobi individuals, finding the

material benefits difficult to resist (Cros and Mégret, 2018). From this point of view, the current generation is torn between a traditional society governed by the rigidity of its codes and the so-called modern society whose dominant characteristics are based on the material gains of men as well as individual well-being.

Based on the above-mentioned, this article discusses the gold mining activity in the Gaoua municipality through the prism of migration, while highlighting the interplay between indigenous locals and migrants and their collaboration in the exploitation of gold sites. This analysis draws on migration theory, which links social and economic dimensions in explaining the rush towards mining areas. Although economic arguments cannot be excluded in the decision to migrate, the sociological theory of migration conceives of it as a decision motivated by the interaction of a plurality of variables. It thus encompasses the environmental, economic, and social fields. Zlotnik (2003) stressed the fact that, in the decision-making process to migrate, interpersonal links between migrants, former migrants, and non-migrants from the areas of origin and destination are of great influence. From this perspective, the collaborative relationships between migrants and non-migrants can be effectively analyzed through the lens of the theory of 'cumulative causality' (Massey, 1990).

Methodological Approach

Study Area

The survey area for this research is the municipality of Gaoua, located in the southwestern region of Burkina Faso. The data was collected in the town of Gaoua and at gold mining sites located within a 20 km radius. This choice was motivated by the fact that most of the people working at these sites live in the town of Gaoua. It is also in this town that they go to purchase the tools and other chemicals (cyanide, mercury, etc.) necessary for the extraction or processing of the minerals, as well as to sell part of their production.

Methodological Approach

The methodology used is qualitative in the sense defined by Olivier de Sardan (2008). It is based on field research and in-depth bibliographic and webographic research on the subject. An exploratory phase enabled us to formulate the initial questions and choose the qualitative approach, as well as the associated survey techniques and tools. From sampling to processing the information produced, including its production, the field phase itself observed the conditions for data validity as suggested by the authors cited above, in particular, triangulation and saturation.

Sampling

Database production was based on a reasoned sampling method. Using this method, several groups of stakeholders were interviewed. Based on preliminary data from the pre-survey (exploratory phase), we first defined these groups theoretically, following Olivier de Sardan's concept of a "strategic group", which he defines as a group of "individuals who, when faced with the same 'problem', have the same attitude, largely

determined by a similar social relationship to that problem" (Olivier de Sardan, 2008: p.81). These groups include Indigenous gold miners, migrant gold miners (also known as non-indigenous miners), landowners, site owners, well owners, diggers, technical service agents (technicians from regional departments of agriculture, education, health, and security), and administrative (governorate, prefecture), municipal, and customary authorities. Indigenous gold miners share the fact that their production methods are changing through contact with migrant gold miners, who are considered to be more experienced innovators bringing about change; landowners are the owners of the land with whom gold miners and the various stakeholders at mining sites (site owners, well owners, diggers, etc.) are obliged to collaborate to access the land to develop their businesses; technical service agents are state representatives responsible for overseeing the technical aspects of their ministerial departments; administrative, municipal, and customary authorities are responsible for enforcing administrative rules relating to the exploitation of natural resources within their jurisdictions. The choice of individuals within each of these groups was guided by three considerations: the competence that the person is likely to possess to provide information that is as reliable and complete as possible; the search for "triangulation by sources" (Olivier de Sardan, 2008: p.80), i.e., the possibility of cross-checking information by varying the interviewees; and the principle of "saturation" (Olivier de Sardan, 2008: p.88), which means that the survey can be terminated when too little new information is obtained from interviews and observations. Therefore, the number and identities of the respondents were not known until the end of the field survey: 29 people in total.

Data Production and Processing Tools and Techniques

In order to produce the data, we used techniques that are well established in the social sciences in this field. These include documentary research, interviews, and observation. The research enabled us to learn about what has been written on the links between gold mining and migration around the world, and particularly in Burkina Faso. The written sources used were mainly scientific publications, but also reports from technical services and press articles. The interviews were semi-structured (see Annexure-I), with the main data sought being the meanings that individuals give to the phenomena. The observations were made both during and outside the interviews. They focused on the physical aspects of the natural or transformed environment (holes, piles of earth, buildings, tools) and human aspects (lifestyles, social relations, attitudes, and practices, etc.).

In order to operationalize each technique, the tool dedicated to it by the scientific method was used: the reading sheet, different interview guides depending on the "strategic groups," and observation grids (physical environment observation grid, observation grid). The technique of mapping using GPS readings enabled the production of a location map of the study area and gold mining sites.

Direct observation is, therefore, based on reporting the observed behavior accurately with as little interpretation as possible (Berthiaume, 2004). It enabled us to collect first-hand data on the context, interactions, behaviors, and processes, and to accurately describe the behaviors observed. The observations focused on social events (how people work or interact with each other, the contexts in which these events take place, etc.), how these events unfold, and the physical environment (work equipment, acquisitions, and

investments by gold miners, etc.). Interviews were the central technique of the method. They took place in homes, gold mining sites, gold trading counters, markets, etc. Data production was carried out in the context of intermittent fieldwork. The data corpus produced was processed using a thematic content analysis approach, which involves grouping information by theme for interpretation informed by readings.

Analysis Theoretical Basis

The development and expansion of artisanal mining in the municipality of Gaoua has led to a significant influx of migrants from diverse backgrounds. The arrival of these gold miners has contributed to the establishment of a new local dynamic in the collaboration between indigenous and non-indigenous people around artisanal mining. This new reality is said to be the basis for many changes in the habits of the local population, both in terms of social interactions and innovations in mining techniques, as well as influences on local representation systems. From this point of view, the arrival of foreign gold miners is a factor of social change according to the definition given by Rocher (1968), for whom social change is "any observable and verifiable transformation over time that affects the structure or functioning of a community in a way that is not temporary and that changes the course of its history." Based on this observation, the study drew on the theory of social change, which refers to all levels of social reality, whether changes in society or changes within society (Bourricaud, 1995; Mendras and Forsé, 1983: p.9). The aim is to analyze observable changes in the behavior of local gold miners and populations. The study also analyzes the interplay between indigenous gold miners and migrant gold miners with a view to creating a mutually beneficial balance.

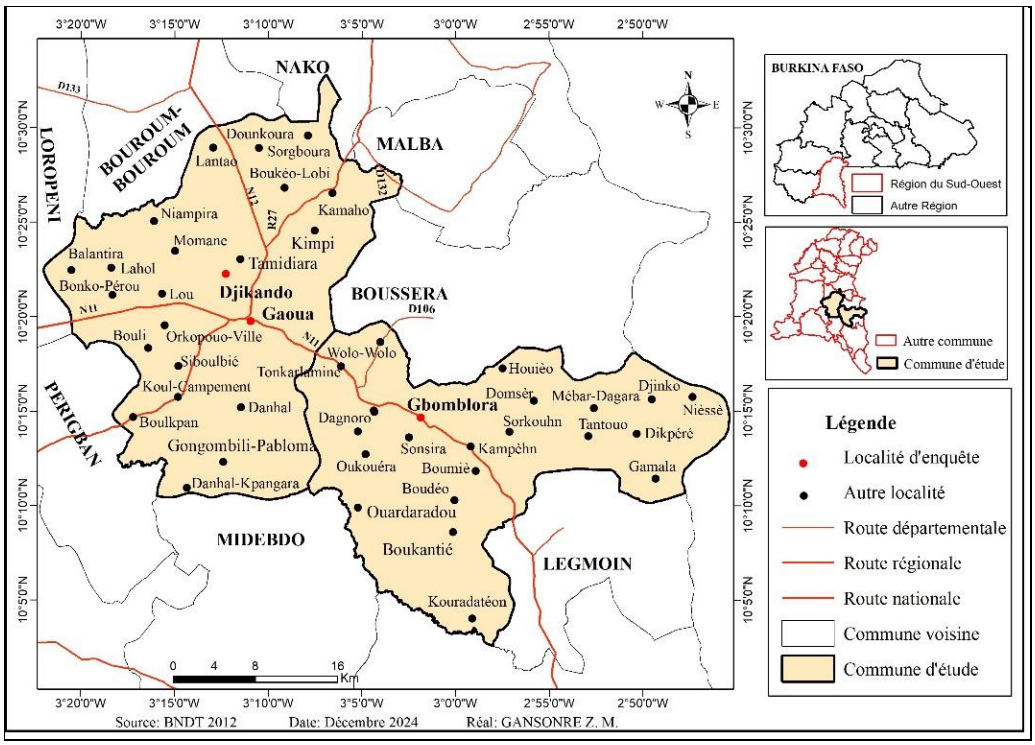

Figure 1: Map of the commune of Gaoua and Gbomblora, Djoro region

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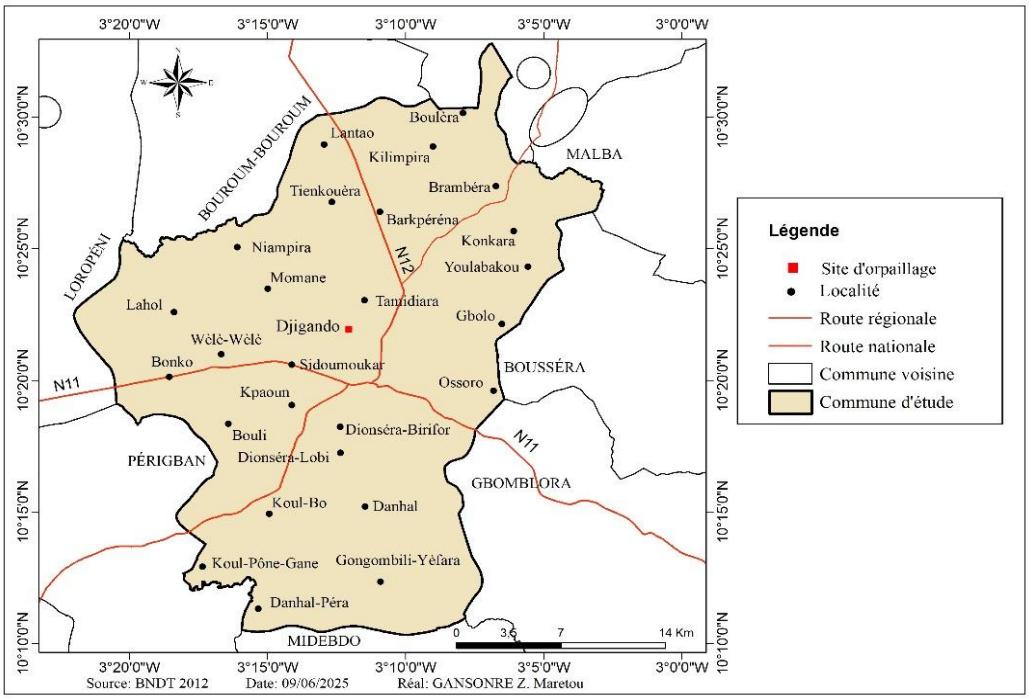

Figure 2: Map of the Djikando gold-panning site

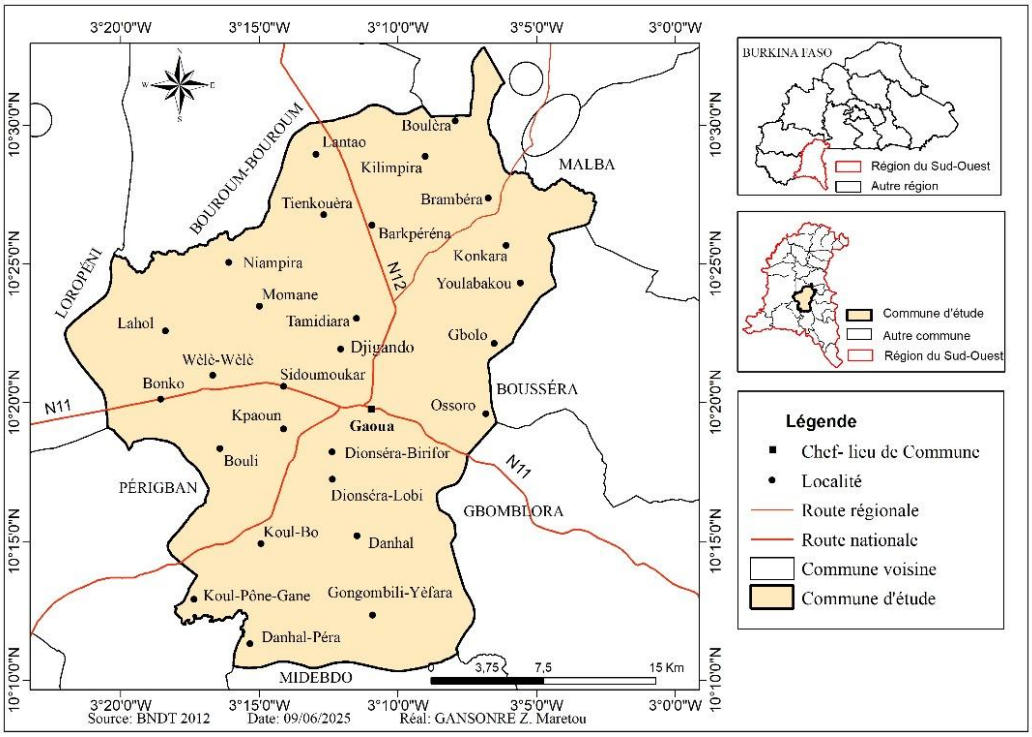

Figure 3: Municipality of Gaoua Map

Results

The research findings are organized around three main themes: first, the historical trajectory of gold mining in the South-West region; second, the interaction/interplay through collaboration between indigenous local actors and migrants in the context of gold mining and, finally, the increasing involvement of indigenous populations in gold panning – an involvement perceived as a deviation by traditional authorities.

Gold Panning History in the Southwest region

Artisanal gold mining, also called gold panning, is a prevailing activity in the West African sub-region and the Burkinabe landscape. The change in accessibility in this sector attracts many people from diverse backgrounds. Thus, many national and foreign workers from neighboring states have been engaged in what can be called a real gold rush for years. This phenomenon is manifested in spontaneous artisanal mines present throughout the national territory. However, gold panning is not a new practice in West Africa and Burkina Faso. According to archaeologist (Kiethega,1983), gold panning has been an activity carried out since the fifteenth century in the South-West region. Following archaeological research in 1981, he identified two large ancestral gold panning areas. This area is known as Lobi country and the Poura[1] municipality. Lobi country, which roughly corresponds to the South-West region of Burkina Faso, still occupies an important place in artisanal gold production today. The results of these archaeological excavations are confirmed by national statistics, largely due to the South-West region providing approximately half of the gold produced through artisanal processes in Burkina Faso in 2016 (INSD, 2017).

There are two types of gold deposits in these main areas in Burkina Faso they are known as deposits by vein in the first instance and impregnation in the second, both of which are found in the areas of Gaoua, Batié, Boromo, Kaya and Dedougou. The eluvial and alluvial deposits resulting from the effects of erosion are mainly those within the reach of artisanal exploitation. These two sources were the first ones that were invested in by gold prospectors who came to the South-West region, namely in Batié and Kampti in the Gaoua municipality. Although there were other gold centers in precolonial Burkina Faso, the authors agree in recognizing that the Gaoua and Poura centers were the main sites of exploitation and investment (Somé, 2004).

Following the work of Kiéthéga (1983) and Père (1988) asserts that the Lobi country was already a gold-producing center before Western colonization. This opinion is supported by Somé (2004), who emphasizes that the Lorhon-koulango or Koulango-Lorhon group, had taken the Gan.[2] As guardians, they largely participated in the

[1] Poura municipality is located in the province of Balés, Boucle du Mouhoun region. It occupies an important place in the history of mining and gold in Burkina Faso, as it was home to the country's first industrial mine. Its exploitation began in the 1940s in modern open-air mode. Subsequently, the mining title was granted to the former Burkina Mining Research and Exploitation Company (SOREMIB) created in 1973.

[2] The Gans are an ethnic group believed to have settled in the area before the Lobi. They are thought to have come from Ghana. Based on the semiotics of the expression ‘gan houè ra’, which in Lobiri means ‘the road of the Gans’, the Lobi are thought to have come to Gaoua after the Gams (Père, 1988).

extraction of what was called “The gold of Lobi” pre-colonization. This group had mastery of the underground extraction of yellow metal, as evidenced by the numerous wells that were discovered in the Obiré region. In addition, the collective memory of the Lobi community attests to the extent and antiquity of this expertise in gold extraction in this part of the extreme south of Burkina Faso. Along these lines, a Lobi patriarch living in the city of Gaoua explains as follows:

> *«Gold has been known to the Lobi people since time immemorial. In the time of our ancestors, gold existed abundantly; it was found on the outskirts of hills, at the level of rivers. Gold was nothing exceptional; only women went out in search of gold, and they used gourds to "collect" the gold drained by the runoff from the rivers. They were also women of an advanced age. They were not looking for gold systematically and permanently as it is seen today. Women searched for gold only at very specific times to solve occasional problems; apart from that, no one professionally sought gold for commercial purposes. At that time, when you saw a man with gold, it was usually to make a sacrifice recommended by the diviner or the chief of the land" (Indigenous Patriarch, Gaoua, 2021).*

Activity exclusively reserved for women in the past, artisanal gold mining has experienced a dynamic in Lobi countries. According to Sawadogo (2021), the droughts of the 1970s and 1980s favored the renaissance of gold panning in regions of sub-Saharan Africa, as the activity was one of the means of resilience for populations then mainly agricultural. This shows the predominant role of droughts in boosting artisanal mining. Artisanal mining is seen by rural households as a tool for resilience and diversification of livelihoods in the face of subsistence farming that is highly dependent on climatic hazards (Girard, Molina-Millán and Vic, 2024; Sangaré, Mundler and Ouedraogo (2016). That said, while artisanal mining is recognized as a central component of the household activity system in rural areas, its environmental and social impacts remain considerable: dangerous working conditions, rudimentary technologies, unskilled labour, injuries, violence on gold mining sites, the use of chemical substances (cyanide, mercury, etc.) and their negative impacts on gold miners and surrounding populations (Ondayo *et al*., 2024). With this in mind, Sevelka (2025) highlights the harmful, toxic and destructive impacts of extraction operations in a given environment. The entrenchment of this activity in the South-West of Burkina Faso has significantly influenced social norms surrounding gold mining, altering both the symbolic representation of gold and the broader relationship between humans and nature in general. The arrival of large numbers of migrants has further contributed to a process of masculinization in gold extraction and usage (Inspector of Primary Education at Kampti, 2021) elaborates:

> “In the Kampti area, gold panning in the form of digging began in 1995 at Kalankolou in the Sirtchora-Mamina area. The site was named Potopoto yaar. Prospectors from other localities criss-crossed the area, digging the earth at the surface in search of gold. They were helped by young people from the town. These young people were predicted to die, as the work they were doing was considered sacrilegious. Despite these predictions, many of these young people are still alive. Initially, the local gold mining sites were frequented exclusively by non-native gold miners until 2005. People from the Lobi culture refused to even go there. As time went on and prospecting became more conclusive, the enthusiasm of the local population began to make itself felt. The Bantara mining boom in 2018 broke the

> ban, and today many young people in the locality have become gold miners" (Inspecteur de l'Enseignement du Premier Degré à Kampti, 2021).

From the above, it can be understood that gold extraction is an ancient phenomenon that today takes on unprecedented dimensions. In 2011, the United Nations Development Program (UNDP) estimated that 1.3 million people were directly involved in gold panning in Burkina Faso, representing 7% of the total population (Assemblée Nationale, 2016; Ministry of the Environment and Quality of Life). The enthusiasm for this extractive activity is explained by multiple factors analyzed through the theory of 'cumulative causality' (Massey, 1990). Among the factors explaining this enthusiasm is youth unemployment.

Firstly, gold panning is an attractive means of income for young people who do not attend school, do not have stable employment, and were previously dependent on agricultural activity. Gold panning is thus an activity that attracts young people from diverse backgrounds. Thus, the work of 'gold prospectors' represents an alternative to agriculture that can help to curb youth unemployment and offer them a choice other than migrating to cities. According to the author, this trend has suffered a significant setback following the economic and political crisis in Côte d'Ivoire in 2002, which redirected migratory flows directed towards the South-West of Burkina Faso. These flows included what could be described as 'gold migrations', involving thousands of Burkinabe. In this context, gold panning presents an alternative livelihood that reduces dependence on climate-sensitive agricultural income. It also serves as an additional activity, enabling individuals to generate earnings that can be used to purchase equipment or livestock.

Secondly, unemployment and poverty influenced by climatic constraints, especially due to the decline and irregularity of rainfall, have resulted in insufficient agricultural production and thus also influenced migratory flows. This deterioration in economic living conditions has led to the continued movement of many populations from the North, Center-North, and Sahel regions to the South-West one. According to a study conducted by the International Organization for Migration (2019), the mining site referred to in this study is perceived as the "El Dorado Burkinbé", which continues to attract many migrant workers from all regions of the country. If in the 1970s, drought forced some populations from dry regions to migrate in search of fertile land internally and externally, today, the gold mining boom has become an attractive sector for internal migration. This is why Rutherford (2022). Migration is an integral part of artisanal and small-scale mining.

In the context of gold panning in the municipality of Gaoua, migrant gold panners had to use strategies to facilitate their social acceptance and their establishment in the different gold panning sites within the locality or surrounding villages. A collaborative attitude can be understood as both an insertion strategy for migrants navigating an unfamiliar environment and a means of control for the indigenous communities to benefit from allowing gold panning in their territories through rental frameworks.

Figure 4: Gold panning site next to a primary school in Sangoutira, Kampti Municipality (Photo by Oumar Sangaré, November 2019)

Actors' Contributions through Collaboration between Indigenous and Non-Indigenous People in Gold Mining

In Burkina Faso, the search for gold leads gold prospectors to invest in land that is often unfamiliar, both inside and outside of the country. To gain acceptance in these new social environments, migrant gold miners use strategies to get closer to the indigenous communities who are the rightful landowners of the gold mining sites. This is illustrated by the example of the municipality of Gaoua. If this collaboration is used by migrants as a means of social integration, for the local population, it is an instrument for maintaining their rights over the gold resource.

Collaboration, a Strategy for Migrant Gold Panners to Integrate

As a result of the mining boom experienced by Burkina Faso since the 2000s, internal migration has taken on new proportions. The discovery of the gold veins attracts waves of population who arrive and organize gold mining activities (Dabiré, 2023, p.43). Indeed, artisanal exploitation requires a short or long-term installation on occupied territories. Whether the exploitation is organized for a short or long stay, migrant gold miners always need the hospitality and permission of the indigenous inhabitants to invest in territories believed to be full of the coveted mineral. However, the time spent settling in a foreign territory does not change the citizenship status of migrants, even though some gold miners in the South West region have lived there long enough to be seen as not only friendly, but also described as "true lobi" by their "tutors" (Cros and Mégret, 2018). Despite the time it takes to settle on a site, "foreign" gold miners have obligations to fulfil towards their hosts, because they must respect the explicit prohibitions regarding moral behavior in the village and economic behavior in the bush (Arnaldi di Balme and Hochet, 2017). It is also this conformist behavior that confers the status of “true lobi” (Cros and Mégret, 2018) and which demonstrates efforts at integration, learning, and respect for local standards of good conduct. According to the testimony of C.A.,

> "The panners regularly make offerings [animals, palm wine, cereals, etc.] and sacrifices according to the lobi tradition, either to ward off bad spells, or to get the chance to discover good veins, or to implore the protection of ancestors. In 2022, there was a robbery at the Djikando site, with the death of men. The gold panners appealed to the customary authorities. The latter recommended offerings in the form of the immolation of animals to purify the earth and appease the anger of the geniuses of the bush, because in the Lobi tradition, it is forbidden to spill human blood that defiles the earth, considered sacred (Supervisor in a gold panning site, Gaoua, 2021)."

In their endeavors, investments, and setting up of formal or informal, semi-industrial or artisanal businesses, the gold-mining migrants are gradually involving the local indigenous communities in the gold mining process. The latter, drawn by the promise of profits obtained by gold prospectors from elsewhere, gradually allowed themselves to be drawn into gold mining. This collaboration benefits both parties; it enables migrants to remain on the sites while allowing indigenous locals to move beyond the margins of gold rent distribution. As a result, mixed gold mining teams have formed around gold extraction activities. This integration strategy is described by OA, nephew of the late canton chief of Gaoua. He states:

> "At first, gold panning was considered taboo for us Lobi men. It was the miners from other regions who practiced artisanal gold mining. This is how friends among these gold miners encouraged me to join them in their work. Little by little, I got involved in the activity, and after several years, I am currently the owner of the gold panning site of Djikando in the commune of Gaoua, where several hundred gold panners work" (O.A., Responsible for a gold panning site, Gaoua, 2021).

According to Cros and Mégret (2018), the collaboration between indigenous Lobi people and migrant gold miners, i.e., migrants who come from other regions to carry out gold panning activities, can be compared to the "tutoring" relationships shared by many communities in many regions of West Africa. The migrants encountered at various gold panning sites are mainly young people from the northern part of the country (Sahel, northern and central-northern regions). Most of these migrants relied on agriculture in their regions of origin. "Tutoring" is a traditional land institution consisting of norms intended to organize relations between "foreigners" and locals in the management of land and associated natural resources (Chauveau *et al.*, 2006). This institution often faces the individualization and increased monetization of land transfers, and in the case of gold panning, it is confronted with the changing and precarious nature of the activity. An instability that tends to undermine the capacity of the institution of "tutoring", strongly anchored in African traditions, to play its role of welcoming and integrating foreign communities.

While collaboration is widely recognized as an effective and even essential strategy for the integration of the gold prospecting migrants, both field data and existing literature reveal that "tutoring" relationships are sometimes imposed rather than voluntary. From the perspective of local actors, these "outsiders" are often criticized as "deviants" perceived as particularly "stubborn" and resistant to local norms. In certain localities, their intrusion and the "capture" of new gold-bearing territories were often carried out

using furtive incursions, particularly at night to deceive and evade the vigilance of the indigenous populations (Cros and Mégret, 2018). The deviant posture described by these authors does not preclude engagement with local populations. When a small group of prospectors discovered a promising area, they were eventually compelled to negotiate with those in charge of the territory. As a result, actors navigated their roles based on context, shifting between different forms of affiliation and belonging (Meur, 2012). In this perspective, a mining site manager from the municipality of Gaoua stated the following:

> "Once the two parties have reached an agreement, the landowner leads the orpailleur before the land chief, who indicates to him what should be brought in terms of offerings to be sacrificed to the deities on the altar. This ceremony is organized by the land chief in the presence of the village notables and the families concerned. The ritual ceremony begins with the questioning of the spirits about the appropriateness of granting or not to the gold miners the authorization to operate the site" (A manager of a gold mining site, Gaoua, 2021).

An analysis of actors' dynamics reveals that beyond the initial "forced" intrusion, settlements on gold sites ultimately occur through dialogue under the authority of community leaders (Cros and Mégret, 2017). In this process, migrants draw on multiple repertoires of action to construct and legitimize their status (Grätz and Marchal, 2003). While some locals choose to collaborate directly with gallery owners, others engage in parallel economic activities such as trade, commerce, and catering (Zidnaba, Millogo and Korogo, 2020). Beyond the dimensions already discussed, the analysis of the above extract also reveals the powerlessness of traditional authorities in the face of upstream land occupation without their explicit authorization. What justifies downstream the idea of joining teams of migrant gold-panners to benefit more from the fruits of gold-panning?

Collaboration as a Means of Control and Mastery of Innovation by Indigenous People

The arrival of gold-mining migrants in the South-West region resulted in dispelling the myth surrounding the use and exploitation of gold in Lobi country. It is in this vein that Grätz and Marchal (2003) asserted that pioneer migrants contributed to the dissemination of this way of life and the reproduction of a particular mining culture in this region. The close relationship between migrants and locals gradually became formalized through collaboration in the search for gold. Thus, the convergence of objectives, that is to say, that of the migrant gold prospector who is to remain on the sites to better benefit from the ore, on the one hand, and the desire of locals to no longer remain on the fringes of benefit from the rent on the other, led these actors to join forces in forming extraction teams (Sawadogo, 2021).

In addition to exploitation through mixed teams (local and migrant), the ownership of the "hole" (mining pit) is an important variable to consider. This thesis is advanced in the work of Mégret (2013), where he explains that the idea of appropriating a hole among the indigenous locals often comes from non-native migrant gold prospectors. Gold miners suggest that the landowner acquire one or more holes in his plot. This approach prevents migrants from being the sole owners of the mining pits, as such sharing often serves to ease tensions between locals and migrant gold miners arising from gold

panning activities. In this dynamic, the children of landowners will also sometimes benefit from the mining pits for free and will often become both gold prospectors and mining pit owners and operators. In addition to landowners, this involvement in the "world of gold" often extends to local authorities (Mégret, 2013). From this experience, the indigenous people who have acquired new knowledge will, in turn, work with other indigenous people to form groups of gold mining pit operators (Sawadogo, 2021).

Beyond the landowner's right of ownership over the gallery, collaboration is also a means of control by the local populations over migrant gold miners. In addition, the integration of locals into the teams of migrant gold miners provides them with greater access to information about gold panning activities. Thus, the association of certain indigenous people in the activity of digging on their land is an effective strategy that positions them to have control over the operations and be able to recover what migrants may owe them according to the terms of the commitments that bind them. From this perspective, far from being a non-rewarding status, the status of a gold prospector's employee is a means for involved locals to closely follow the development of gold mining activities in order to be able to alert their communities of new site discoveries. According to Sawadogo (2021), this monitoring process allows the landowner to claim his share once the diggers reach the rich vein. Based on this experience, many customary landowners have been able to take advantage of the situation by transferring land for the duration of exploitation (Cros and Mégret, 2018).

In addition to this dynamic, manifested through the constitution of mixed teams for the search for gold, the close relationship between gold prospectors from elsewhere and indigenous locals has also been a channel for learning and sharing innovation in the sector of artisanal gold search sector. The gold prospector, having traveled to many locations in search of gold, is also able to increase his knowledge in the gold panning sector. Thus, the collaboration serves as an opportunity for "neo-gold panners" to adapt and align themselves with the ongoing modernization of the sector.

Modernization was observed both in extraction methods and in the use of advanced tools such as metal detectors, mineral crushing mills, motor pumps for groundwater extraction and dynamites for clearing hills - as well as chemical inputs like cyanide and mercury, all aimed at maximizing productivity (Mégret, 2013; Sangaré, 2022; Sawadogo, 2021; Zongo, 2009). The above is further elucidated by a Lobi gold prospector in these terms:

> "At first, gold mining was done exclusively through natural methods; women used gourds to sift through the mud and extract gold nuggets in the rivers. In recent years, with the arrival of migrant gold miners, gold miners have been using explosives, metal detectors, and even cyanide or mercury to extract as much gold as possible from sludge residues. These modern techniques allow miners to increase their gains. Grain mills are used a lot to reduce pieces of rock into powder, not to mention motor pumps to extract water in underground galleries" (A Gaoua colliery, 2021).

Indigenous People's Entry into Gold Panning Perceived as a Deviation for Conservatives

The gold panning activity, in view of its spread and the enthusiasm it has generated, is emerging as an employment sector for young people from rural and urban areas of Burkina Faso. However, social representations of gold made this metal a good whose

use and ownership are strictly codified by customary Lobi standards. For the defenders of custom, soiling the earth in search of gold could drive away the metal and the geniuses that the earth hosts. Given the interconnection between society and nature, acting on nature by not respecting predefined standards can compromise the fabric of society. It is in this vein of ideas that Héritier (1996, p.131) asserted that changes in the relationships between the Lobi and gold could compromise women's fertility because there exists a strong *correspondence between social order, biological order, and climatic order*. This relationship between humans and nature is not unique to Africa, as Ramirez, Pulhin and Inoue (2022) discuss the existence of a connection between humans and nature in the context of the Philippines.

Despite the mythological preservation surrounding gold, the dynamics of change undergone by African societies have ended up influencing social representations surrounding this resource. According to Sawadogo (2021, p.61), *"gold, previously considered a cursed material, is increasingly seen as a source of foreign currency and employment for men in the region who only practiced subsistence agriculture and emigration to Côte d'Ivoire, where they worked mainly on plantations"*. As aforementioned, historically, only women were permitted to engage in alluvial and eluvial mining in order to sell what was considered 'dead gold', dormant deposits found in dried-up riverbeds or at the foot of hills (Schneider, 1993). As society is dynamic, this reality is undergoing change in the face of modernity and migration. A connection can be drawn between the African conception of the relationship between humans and nature and that of the Indians. Hansepi and Laisram (2022) highlight the role of Karbi women in India in environmental conservation. They argue that the roles assigned to women in traditional societies bring them into direct contact with natural resources, which are preserved through respect for taboos and animist rituals. This practice reflects a broader cultural shift; gold has transformed from being viewed as a dangerous, malevolent substance to be avoided to a coveted resource to be actively sought and accumulated (Dah and Somda, 2023).

This is why Grätz and Marchal (2003) describe the mining camps scattered across West Africa as hot spots, spaces of cultural invention and daily economic struggles, and frequent conflict. These dynamics contribute to the stigmatization of gold mining sites as places of social deviance and moral decline. For Ntiri, Koomson and Appiah-Boateng (2025), paradoxically, artisanal mining activities have proliferated in many resource-rich sub-Saharan African countries despite their links to conflicts, particularly the frequency of conflicts involving indigenes and migrants. Young indigenous Lobi come to wile with the prohibitions of their community. For Cros and Mégret (2018), the cohabitation with gold miners, mostly from central and northern Burkina Faso, led the Lobi to transgress the 'ban on gold'. Gold mining endangers cultural sites, compromising the preservation of cultural heritage is important to support sustainable tourism (Potryvaieva, 2025). The mutation due to the massive arrival of gold panning migrants is confirmed with some bitterness by the land chief of Gaoua in these terms:

> "Gold panning has led to a great upheaval in our habits and customs. All the rituals that were used as prerequisites for land occupation are no longer observed by foreigners who come to settle in the Lobi countries. With the development of gold panning sites, things have worsened. Most of the time, buyers of land for gold mining purposes do not consult me; transactions are currently done directly

> between the landowner and the mining contractor. All this is caused by poverty and the greed of our parents. A peasant who never saw 178.29 USD is confused when offered 1,784.12 USD. This drives him crazy and he immediately forgets his values" (Gaoua land chief, 2021).

For the elders, the consequences of this misunderstanding and breach of certain fundamental values of Lobi society are dramatic, even criminal. In Tobo, for example, a village located in the rural commune of Gbomblora, 29 km from Gaoua, young people in search of gold have desecrated graves and sacred sites. Fields and dwelling houses have been ransacked and destroyed by the gold diggers. Nothing seems capable of halting the relentless race for gold. A resident interviewed in the village attested to the extent of the misconduct among gold miners, highlighting the seriousness that such misconduct can reach:

> "Just a week ago, they discovered human bones; they fled, but they still look for a corner to return. The grave of my mother-in-law, who died in 2015, was desecrated. The young people, while digging, fell into the coffin. They sought to know where the skull is located to extract gold from it" (A native of the village of Tobo, 2021).

If in the past, the gold miners who engaged in the desecration of tombs and sacred sites were exclusively composed of young non-native gold miners, today, gold miners who desecrate tombs are composed of both young migrants and locals alike. The trend towards the desecration of tombs is underpinned by a myth built around gold, according to which the skulls of corpses attract gold like a magnet attracts iron. In the logic of this belief, the more bodies are buried in a place, the greater the chances of finding gold in that area. It is a deviance whose source lies in the development of gold panning:

> "All these strange behaviors recently appeared. We did not know that these types of behavior were disrespectful towards our most sacred values. Unfortunately, it is observed that it is with the development of gold panning and massive migration that these practices developed" (Responsable coutumier, Gaoua, 2021).

Discussion

The deviance in gold panning as a vector of innovation in rural countries

The cohabitation between the gold miners from elsewhere and the indigenous Lobi of the Southwest is analyzed by Cros and Mégret (2018) as a moment of transgression of "the ban on gold" in Lobi country. This questioning of the cultural norms around gold is explained by the fact that panning for gold is a sector that nowadays attracts many young Lobi with regard to the economic opportunities it provides. As a result, the entry of some Lobi into this activity, once considered a 'taboo', can be seen from the angle of an innovative deviance. This perspective is based on the design of Merton (1965), which proposes to analyze innovation by focusing on means rather than goals. Thus, the innovator is deviant when the means he uses deviate from those defined by his milieu. Starting from this conception, the theoretical reflection on gold panning as an innovative deviance highlights the discrepancies that exist between traditional norms based on customary logic and the conception of gold panners perceived here under the angle of an "under culture" which is strongly dominated by economic logic. Guided by the pursuit

of wealth, this economic logic is described by Sevelka (2025) in the case of aggregate extraction in land use compatibility as not being behaviour, because it is selfish financial interests for profit that take precedence. A parallel can be drawn between the Lobi society's conception, which places particular emphasis on cultural identity, and that of authors such as Konstantinidou and Moraitis (2023) when they discuss the important place of mountain identity and aspirations for development in a Greek locality. Their reflections show that culture is an essential pillar of integrated development.

In agreement with Cléret (2009), we show that deviance in the field of gold mining fuels a "subculture" manifesting as resistance to a dominant culture. It is in this wake that Merton (1965) uses the notion of subculture to describe the emergence of new forms of values and practices among disadvantaged social strata. It is in the same logic that Jenks (2005) argues that subculture allows for a particular specification and demarcation of special interests to be defined and honored as distinct from the values of a group of people within a given community. Acting in the gold panning sector in Lobi countries requires the person to be able to adapt to the realities of this social environment, but in doing so, they enter into a posture of transgression of local customary values. This contrast is not without consequences for the gold miner, stigmatization being one of them: stigmatization of the gold miner and his profession. Gold panning is, indeed, apprehended by conservative indigenous people as a source of contempt for customary norms regarding prospecting and the use of gold. The gold prospector is the embodiment of this culture shock.

Yet, this conflict of values is a source of innovation. Characterized by a constant mobility of multiple actors around the mining sites (Traoré, 2023), gold panning operates as a system of dynamic "passenger models" (Behrends, Park and Rottenburg, 2014; Olivier de Sardan, 2021). Tools and practices come together to produce ways of doing and being shared to the point of making gold panning a full-fledged culture. This is based on the separation between the sacred and the profane, gold now falling under the second domain. Physically materialized by the separation between gold-mining sites and villages, this distinction is as spatial as it is temporal (Bryon-Portet, 2013), the customary design being catalogued by the gold miners as belonging to a bygone era.

In sum, the posture of the prospector not respectful of the customary standards that frame gold and panning finds a convergence with the figure of the innovative deviant described by Merton (1965), who stands out as a character who emphasizes the accumulation of material wealth, because making it the symbol of success in society. Gold for gold dominates the maintenance, protection, and preservation of standards, conclude Cros and Mégret (2017) in their article on 'Ethnography of a gold banknote exhibition in Burkina Faso.

Conclusion

This research demonstrates that migrant gold miners have been key drivers of the diffusion of innovation within the gold panning sector in the South-West region (Sangaré, 2022). Formerly kept away from gold work by custom, young Lobi locals have gradually acquired expertise in the field by engaging massively and resolutely in collaborative relationships with migrants who have come in search of the yellow metal. The acquired knowledge allows experienced locals to work with others to form groups

of gold panning pit operators. We are thus witnessing a masculinization of gold panning, which was exclusively feminine and is now beyond the control of women who find themselves relegated to practicing related tasks.

This unexpected shift, given the strong customary opposition to male involvement in gold panning, is thus a direct result of the collaborative stance adopted by the indigenous locals towards migrants, even at the cost of violating the most important customary prohibitions. While collaboration enabled migrants to gain acceptance and establish themselves as gold partners, for local communities, it served as a means of monitoring activities to ensure they were not excluded from the distribution of gold revenues. Also, locals who find themselves in mixed groups of gold miners are invested with a mission entrusted by members of the community they belong to.

Additionally, collaboration has been a means of mastering innovation in artisanal gold research, considering its evolving nature. This allowed young Lobi people to learn how to make gold panning an opportunity and a means of resilience in the face of widespread economic insecurity in rural Burkina Faso. The entry of indigenous people into gold panning is seen as a deviation by conservative actors committed to preserving customary norms. This shift has raised concerns about the maintenance and survival of traditional gold-related standards in the South West region.

References

Arnaldi di Balme, L. and Hochet, P. (2017). Mobilité interne et accès aux ressources naturelles dans l'Ouest du Burkina Faso–Projet de citoyenneté locale ou production d'une minorité (Internal mobility and access to natural resources in western Burkina Faso – Local citizenship project or minority production). *Étude-récit, laboratoire Citoyennetés*. DOI: https://doi.org/10.3917/afco.267.0113.

Assemblée Nationale (2016). Commission d'enquête parlementaire sur la gestion des titres miniers et la responsabilité sociale des entreprises minières, septembre 2016, Ouagadougou, Burkina Faso (Parliamentary Commission of Inquiry into the Management of Mining Titles and the Social Responsibility of Mining Companies, September 2016, Ouagadougou, Burkina Faso.

Behrends, A., Park, S.J. and Rottenburg, R. (2014). Travelling Models: Introducing an Analytical Concept to Globalisation Studies. In: Behrends, A., Park, S.J., & Rottenburg, R. (Eds.), *Travelling Models in African Conflict Management: Translating Technologies of Social Ordering.* London: Brill, pp. 1-40. DOI: https://doi.org/10.1163/9789004274099_002.

Berthiaume, D. (2004). L'observation de l'enfant en milieu éducatif (Child observation in an educational setting). Montréal: Éditeur, Gaetan Morin. SBN-10 : 2891058798, ISBN-13: 978-2891058797, 288p.

Bourricaud, F. (1995). Changement social (Social change), Encyclopédie Universalis, pp. 352-356.

Bryon-Portet, C. (2013). *Sociologie des sociétés fermées* (Sociology of closed societies). Presses universitaires de la Méditerranée, 978-2-36781-023-2.hal-03194352.

Chauveau, J.P., Colin, J.P., Jacob, J.P. and Delville, P.L. (2006). *Modes d'accès à la terre, marchés fonciers, gouvernance et politiques foncières en Afrique de l'Ouest. Résultats du projet de recherche CLAIMS*, IIED (Land access patterns,

land markets, governance and land policies in West Africa. Results of the CLAIMS research project, IIED), 97p. Available online at: https://shorturl.at/H8P2m [accessed on 15 June 2025].

Cléret, B. (2009). Les sous-cultures juvéniles à l'aune de la CCT: L'apport des Cultural Studies. *14èmes Journées de Recherche en Marketing de Bourgogne*, November 2009, Dijon, France. Halshs 01597599

Cros, M. and Mégret, Q. (2017). Les « craquants ». Ethnographie d'une exhibition des billets de l'or en pays lobi burkinabè (The "crackers". Ethnography of an exhibition of gold banknotes in Burkinabe Lobi country), *Cargo*, n°5: 27-45. Available online at: https://shorturl.at/iH2xk [accessed on 15 June 2025].

Cros, M. and Mégret, Q. (2018). L'or, le sang, la pluie et les génies: Chroniques ethnographiques d'un conflit entre orpailleurs et autochtones lobi du Sud-Ouest burkinabè (Gold, Blood, Rain and Genies: Ethnographic Chronicles of a Conflict Between Gold Miners and Indigenous Lobi Peoples of Southwest Burkina Faso). *Afrique Contemporaine*, 267: 113-134. Available online at: https://tinyurl.com/muryxyny [accessed on 15 June 2025].

Dabiré, B.H. (2023). Les flux migratoires Burkina Faso-Côte d'Ivoire à l'épreuve du temps: Rupture ou continuité (Burkina Faso-Ivory Coast migratory flows put to the test of time: Rupture or continuity). In: *Migration Sud/Sud: Burkina Faso-Côte d'Ivoire*. Presses Universitaires de Ouagadougou (PUO), Université Joseph KI-ZERO, Burkina Faso, p.19-51.

Dah, N.A. and Somda, D.V. (2023). Orpaillage au Sud-Ouest du Burkina Faso: Une évolution au détriment de la femme et de l'environnement chez les Lobi et les Birifor (Gold panning in south-west Burkina Faso: Developments to the detriment of women and the environment among the Lobi and Birifor peoples). *Revue Échanges,* 021: Décembre 2023.

Girard, V., Molina-Millán, T. and Vic, G. (2022). Artisanal mining in Africa. NOVAFRICA Working Paper Series. No. 2201. Available online at: http://www.novafrica.org/ [accessed on 15 June 2025].

Grätz, T. and Marchal, R. (2003). Les chercheurs d'or et la construction d'identités de migrants en Afrique de l'Ouest (Gold prospectors and the construction of migrant identities in West Africa). *Politique africaine*, 91(3): 155-169. DOI: https://doi.org/10.3917/polaf.091.0155.

Hansepi, L. and Laisram, R. (2022). Karbi Women and Environmental Conservation. *Grassroots Journal of Natural Resources*, 5(3): 1-17. DOI: https://doi.org/10.33002/nr2581.6853.050301.

Héritier, F. (1996). Stérilité, aridité, sécheresse. Quelques invariants de la pensée symbolique (Sterility, aridity, drought. Some invariants of symbolic thought,). In: *Masculin/féminin. La pensée de la différence*, Paris: Odile Jacob, p.87-132. Available online at: https://dokumen.pub/franoise-heritier-9781800733336.html [accessed on 15 June 2025].

INSD (2017). Enquête nationale sur le secteur de l'orpaillage au Burkina Faso (National survey on the gold mining sector in Burkina Faso), 9p. Available online at: https://www.insd.bf/sites/default/files/2021-12/Principaux_Resultats_ENSO.pdf [accessed on 15 June 2025].

International Organization for Migration (2019). Dynamiques migratoires vers les sites d'orpaillage au Burkina Faso: Le cas des sites de Warwéogo et Galgoumi. In: ONU Migration, Résumé de recherche-Afrique de l'Ouest et du Centre (Migration

dynamics towards gold mining sites in Burkina Faso: The case of the Warwéogo and Galgoumi sites. UN Migration, Research Summary-West and Central Africa, Novembre 2019. Available online at: https://shorturl.at/ioeRp [accessed on 15 June 2025].

Jenks, C. (2005). *Culture*, Second edition. London: Routledge.

Kiethega, J.B. (1983). *L'or de la Volta Noire – Archéologie et histoire de l'exploitation traditionnelle (région de Poura, Haute Volta) (Gold of the Black Volta – Archaeology and history of traditional exploitation (Poura region, Upper Volta)*). Paris: Karthala, 247p. Available online at: https://www.sudoc.fr/000740586 [accessed on 15 June 2025].

Konstantinidou, E. and Moraitis, K. (2023). Mountain Identity and Development Aspirations. *Grassroots Journal of Natural Resources*, 6(1): 106-118. DOI: https://doi.org/10.33002/nr2581.6853.060105.

Massey, D.S. (1990). Les origines sociales et économiques de l'immigration (The social and economic origins of immigration). *Annales de l'Académie américaine des sciences politiques et sociales*, 510(1): 60-72. DOI: https://doi.org/10.1177/0002716290510001005.

Mégret, Q. (2013). L'argent de l'or Exploration anthropologique d'un « boom » aurifère dans la région Sud-Ouest du Burkina Faso (Gold Money Anthropological exploration of a gold boom in the southwest region of Burkina Faso). Thèse de doctorat en sociologie et anthropologie. Université Lumière Lyon 2, 452p. Available online at: https://tinyurl.com/5y8uxfph [accessed on 15 June 2025].

Mendras, H. and Michel, F. (1983). Le changement social (Social change). *Tendances et paradigmes*, Paris. Available online at: https://www.sudoc.fr/00073005X [accessed on 15 June 2025].

Merton, R.K. (1965). Structure sociale, anomie et déviance (Social structure, anomie and deviance), pp167-191. In: Merton, R.K. (ed.), *Éléments de théorie et de méthode sociologique, Pion [traduction et adaptation de Merton (1949) par H. Mendras]*. Available online at: http://classiques.uqac.ca/ [accessed on 15 June 2025].

Meur, P.Y.L. (2012). Grandeurs villageoises. La politique des ressources et des appartenances au centre du Bénin (Village Grandeur. The Politics of Resources and Belongings in Central Benin). *Cahiers d'études africaines*, 52(208): 877-903. Available online at: https://www.jstor.org/stable/41708212 [accessed on 15 June 2025].

Ntiri, R.O., Koomson, F. and Appiah-Boateng, S. (2025). Dialoguing for peaceful coexistence among migrants and host communities in artisanal and small-scale mining in Ghana, *African Journal of Applied Research,* 11(2): 546-570. DOI: https://doi.org/10.26437/ajar.v11i2.1060.

Olivier de Sardan, J.P. (2008). *La rigueur du qualitatif. Les contraintes empiriques de l'interprétation socio-anthropologique (The rigor of qualitative research. The empirical constraints of socio-anthropological interpretation),* Louvain-la-Neuve: Academia-Bruylant, 374p. Available online at: https://shorturl.at/WUrnq [accessed on 15 June 2025].

Olivier de Sardan, J.P. and Vari-Lavoisier, I. (2022). Introduction: pour une approche comparatiste des modèles voyageurs (Introduction: for a comparative approach to travel models). In: Revue internationale des études du développement, 248. DOI: https://doi.org/10.4000/ried.280.

Ondayo, M.A., Watts, M.J., Clive, J., David, M., King, C.P. and Osano, O. (2024). Review: Artisanal Gold Mining in Africa — Environmental Pollution and Human Health Implications. *Expo Health,* 16: 1067-1095. DOI: https://doi.org/10.1007/s12403-023-00611-7.

Ouédraogo, A. (2020). Les détentrices de hangars de traitement de l'or face à la technique de cyanuration (sud-ouest du Burkina Faso) (Owners of gold processing sheds face the cyanidation technique (southwest Burkina Faso)), *Journal des africanistes*, 90-1: 168-187. DOI: https://doi.org/10.4000/africanistes.9528.

Père, M. (1988). Les lobi. *Tradition et changement. Burkina Faso (The Lobi. Tradition and Change. Burkina Faso*). Laval, Éditions Siloë, 24 cm, XXII-922p, 2. Available online at: https://excerpts.numilog.com/books/9782905259417.pdf [accessed on 15 June 2025].

Potryvaieva, N. (2025). The Impact of Economic and Technological Factors on the Global Environment: Guest Editorial. *Grassroots Journal of Natural Resources*, 8(1): e1-e12. DOI: https://doi.org/10.33002/nr2581.6853.080100.

Ramirez, M.A.M., Pulhin, J.M. and Inoue, M. (2022). Local People's Perceptions of Changing Ecosystem Services in Baroro River Watershed, Philippines. *Grassroots Journal of Natural Resources*, 5(1): 17-39. DOI: https://doi.org/10.33002/nr2581.6853.050102.

Rocher, G. (1968). Introduction à la sociologie générale (Introduction to General Sociology), Tome 3, édition HMH, Paris, 1968. Available online at: https://www.sudoc.fr/106824066 [accessed on 15 June 2025].

Rutherford, B. (2022). Migration, authority and the gendered organization of labour in artisanal gold mining in Sierra Leone (and Mozambique). *Africa,* 92: 354–372. DOI : https://doi.org/10.1017/S0001972022000262.

Sangaré, O. (2022). Orpaillage et changement social dans la commune de Gaoua au Burkina Faso (Gold panning and social change in the commune of Gaoua in Burkina Faso). Thèse de doctorat unique de Sociologie, Université Joseph Ki-Zerbo, 340 p.

Sangaré, O., Mundler, P. and Ouedraogo, L.S. (2016). Institutions informelles et gouvernance de proximité dans l'orpaillage artisanal. Un cas d'étude au Burkina Faso (Informal institutions and local governance in artisanal gold mining. A case study in Burkina Faso.). *Revue Gouvernance / Governance Review*, 13(2): 53–73. DOI: https://doi.org/10.7202/1039240ar.

Sawadogo, E. (2021). Discours, pratiques et dynamiques environnementales autour de l'orpaillage dans la commune de Kampti, (Sud-ouest du Burkina Faso) (Discourse, practices and environmental dynamics around gold panning in the commune of Kampti, (South-west of Burkina Faso)). Géographie. Université Panthéon-Sorbonne-Paris I; Université Joseph Ki-Zerbo (Ouagadougou, Burkina Faso). Available online at: https://tinyurl.com/3vdpa5r4 [accessed on 15 June 2025].

Schneider, K. (1993). Extraction et traitement rituel de l'or, *In Images d'Afrique et sciences sociales: Les pays lobi, birifor et dagara (Burkina Faso, Côte-d'Ivoire et Ghana),* (Extraction and ritual processing of gold, In Images of Africa and social sciences: The Lobi, Birifor and Dagara countries (Burkina Faso, Ivory

Coast and Ghana). Paris: Karthala-Orstom, p.190-199. Available online at: https://tinyurl.com/36ux3j37 [accessed on 15 June 2025].

Sevelka, T. (2025). Sustainable Land Use Planning in Ontario: Protecting Against Aggregate Extraction Operations. *Grassroots Journal of Natural Resources,* 8(1): 82-137. DOI: https://doi.org/10.33002/nr2581.6853.080104.

Somé, D.B. (2004). Les orpailleurs du Burkina Faso: exclusion sociale et rapport à l'environnement (Gold miners in Burkina Faso: social exclusion and relationship with the environment). Thèse de doctorat de sociologie, Université Cheick Anta Diop, Dakar

Traoré, N.G. (2023). Orpaillage et circulation d'objets et de savoirs dans le Sud-Ouest du Mali. Circulations matérielles et immatérielles dans le Sud global (Gold panning and circulation of objects and knowledge in the Southwest of Mali. Material and immaterial circulations in the Global South), p.107. Available online at: http://journals.openedition.org/anthropodev/2189 [accessed on 15 June 2025].

Werthmann, K. (2003). Ils sont venus comme une nuée de sauterelles". Chercheurs d'or au Burkina Faso (They came like a swarm of locusts. Gold prospectors in Burkina Faso). In: R. Kuba, C. Lentz, C. Somda Nurukyor (éd.), *Histoire du peuplement et relations interethniques au Burkina Faso*. Paris: Karthala, p.97-110. Available online at: https://shorturl.at/0Mv6w [accessed on 15 June 2025].

Zidnaba, I., Millogo, A.A. and Korogo, S. (2020). Impact de l'orpaillage sur la santé de la population dans le sud-ouest du Burkina Faso (Impact of gold panning on the health of the population in the southwest of Burkina Faso). *Sciences et technique, Lettres, Sciences sociales et humaines,* 36(1): 113-138. Available online at: https://shorturl.at/HVxAD [accessed on 15 June 2025].

Zlotnik, H. (2003). Théories sur les migrations internationales (Theories on international migration), In: (Caselli G., Vallin J. and Wunsch Gdir eds.), *Démographie: analyse et synthèse, vol IV Les déterminants de la migration* Paris: Ined, pp.55-78. Available online at: https://shorturl.at/Y2yGo [accessed on 15 June 2025].

Zongo, M. (2009). Niangoloko, un carrefour migratoire au Nord de la Côte d'Ivoire (Niangoloko, a migratory crossroads in the north of Ivory Coast). *Hommes & Migrations*, 1279: 88-102. DOI: https://doi.org/10.4000/hommesmigrations.325.

Doi: https://doi.org/10.33002/nr2581.6853.080204 Open Access

Annexure-I: Interview guides for residents/communities

Date:	Place:	Time:	Tel:

Subjects	Questions
1. Demographic data on the respondent	Surname & Forenames: - Age Profession: - Sex: Place of residence: - Number of children Level of education: - Date of arrival in the locality Number of wives: - Number of years in the locality Province/village of origin
2. Artisanal mining	Your opinion on artisanal mining (gold panning) What was the situation in the locality before the opening of artisanal mining sites What is the nature of the relationship between gold panners and the local population What contribution do gold panners make to the development of the village What difficulties do you encounter with gold panners?
3. How gold miners settle	When did the mine open in your locality? How did the gold panners arrive in your locality? How was land acquired in your locality? What is the traditional procedure for acquiring land in your locality? What are the current traditional procedures and steps taken by the gold panners to acquire land? How did the population react to the acquisition of land by the gold panners?
4. Nature of relations between different social groups	What was the nature of existing relations between the different social groups before the opening of the gold panning sites? What is the current nature of relations between the different social groups since the opening of the artisanal mine?
5. Nature of social change	What types of changes have taken place in the commune since the opening of the gold-mining sites in terms of: economic _ demographic _ socio-cultural (norms, values, customs, mores, social practices) _ environmental _ political _ urbanization What types of changes have taken place in the commune since the opening of the gold-mining sites in terms of: the elderly _ women (feminization of the working population) _ young men _ young girls?
6. Causes of social change	What are the causes of the changes that have taken place since the start of gold mining in your locality in terms of: economic _ demographic _ socio-cultural (norms, values, customs, mores, social practices) _ environmental _ political _ urbanization What are the causes of the changes that have taken place since the start of gold mining in your locality in terms of: the elderly _ women (feminization of the working population) _ young men _ young girls?
7. Consequences of social change	What are the consequences of the social changes brought about by gold panning in your locality in terms of: economic _ demographic _ socio-cultural (norms, values, customs, mores, social practices) _ environmental _ political _ urbanization

	What are the consequences of the social changes brought about by gold panning in your locality in terms of: the elderly _ women (feminization of the working population) _ young men _ young girls?
8. Action to be taken to reduce the effects	What actions can be taken locally to reduce the negative effects of the social changes brought about by the practice of gold panning in your locality in terms of : economic _ demographic _ socio-cultural (norms, values, customs, mores, social practices) _ environmental _ political _ urbanization What action can be taken locally to reduce the harmful effects of the social changes brought about by gold panning on the elderly _ women (feminization of the working population) _ young men _ young girls?
9. History of the village	Tell me about the history of the village and the origins of its inhabitants.
10. Customary organisation and the role of notables in land governance	What is the role of the village chief in land management? What is the role of the land chief in land management? What are the prohibitions in this village regarding land and why? What are the most important traditional ceremonies organised in the village? What are the aims of these ceremonies? What is the method of access to land and the role of the notables? What are the rituals (norms, rites, norms, values, social practices) are organised around land What prohibitions apply to gold panning What are the customs, norms and traditions of the inhabitants in relation to land?
11. Customary organisation and the role of notables in gold governance	What is the role of the village chief in the management of gold What is the role of the land chief in the management of gold What is the history of gold panning in the village What is the traditional management of gold panning What are the beliefs about gold in local tradition What are the conditions of use of gold in local tradition (by men, women...) What are the rituals (norms, values, social practices) organised around gold?) What rituals (norms, values, social practices) are organised around gold What are the customs, norms and traditions of the inhabitants in relation to gold What are the prohibitions surrounding gold and why in this commune?
12. How gold mining sites are acquired and operated	Conditions and procedures for acquiring gold-panning sites Conditions and procedures for operating gold-panning sites Situations that could lead to land withdrawal
13. The relationship between local tradition and the practice of gold panning	What is the relationship between local tradition and the practice of gold panning?
14. Types of relationship between gold miners and local populations	Types of relations you have with gold panners Do local people and gold panners clash? If so, why?
15. Closing the interview	Do you have anything to add that we haven't mentioned? Thanks

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Annex: Interview guides for artisanal miners/gold miners

Date:	Place:	Time :	Tel :
Subjects	Questions		
1. Demographic data on the respondent	Surname & Forenames: Profession: Place of residence: Level of education: Number of wives: Province/village of origin	- Age - Sex: - Number of children - Date of arrival in the locality - Number of years in the locality	
2. Artisanal mining	Opinion on artisanal mining Situation of the locality before the opening of artisanal mining sites Nature of relations between gold miners and local populations Contribution of gold miners to the development of the locality Difficulties encountered with local populations How you were received by local populations on your arrival		
3. How gold miners settle	Date of opening of the mine in the commune Geographical origin of the gold panners How the gold panners arrived in the commune Ways in which the gold panners acquired land Traditional procedure for acquiring land in the locality Traditional procedures and steps taken by the gold panners to acquire land Reaction of the population to the acquisition of land by gold panners		
4. Nature of relations between different social groups	Nature of the relationships that existed between the different social groups before the opening of the gold panning site Nature of the relationships that currently exist between the different social groups since the opening of the gold panning site		
5. Nature of social change	Nature of changes in the locality since the opening of the gold panning site in terms of: economic _ demographic _ socio-cultural (norms, values, customs, social practices) _ environmental _ political _ urbanization Nature of changes in the locality in terms of: the elderly _ women (feminization of the working population) _ young men _ young girls		
6. Causes of social change	Causes of changes in the locality (since gold mining began) in terms of: economic _ demographic _ socio-cultural (norms, values, customs, mores, social practices) _ environmental _ political _ urbanization Causes of changes in the locality (since gold mining began) in terms of: older people _ women (feminization of the working population) _ young men _ young girls		
7. Consequences of social change	Consequences of the social changes brought about by gold panning in the local community in terms of: economic _ demographic _ socio-cultural (norms, values, customs, mores, social practices) _ environmental _ political _ urbanization Consequences of the social changes brought about by gold panning in terms of: the elderly _ women (feminization of the working population) _ young men _ young girls		
8. Action to be taken to reduce the effects	Actions that can be taken locally to reduce the negative effects of the social changes caused by the practice of gold panning in the locality in terms of: economic _ demographic _ socio-cultural (norms, values, customs, social practices) _ environmental _ political _ urbanization		

	Actions that can be taken locally to reduce the negative effects of the social changes caused by the practice of gold panning in terms of: the elderly _ women (feminization of the working population) _ young men _ young girls
9. Customary organisation and the role of notables in land governance	Role of the village chief in land management Role of the land chief in land management Prohibitions on land and the reasons for them Main traditional ceremonies organised in the locality Aims of these ceremonies Method of access to land and the role of notables Rites (norms, Rites (norms, values, social practices) organised around land Prohibitions around the practice of gold panning Views on the customs, norms and traditions of local people in relation to land The role of women in land management in Lobi country The role of men in land management in Lobi country
10. Customary organisation and the role of notables in gold governance	Role of the village chief in the management of gold Role of the land chief in the management of gold History of gold panning in the village Traditional management of gold panning Representation of gold in local tradition Conditions for the use of gold in local tradition (by men, women, etc.) Rites (norms, values, social practices) organised around gold Viewpoint on the customs, norms and traditions of the inhabitants in relation to the gold prohibited in this village in the area of gold and what are the consequences of this?) Rites (norms, values, social practices) organised around gold Viewpoint on the customs, norms and traditions of the inhabitants in relation to gold Gold mining in this village is forbidden and what are the reasons for this Role of women in gold mining in Lobi country Role of men in gold mining in Lobi country
11. How gold mining sites are acquired and operated	Conditions and procedures for acquiring local gold panning sites Conditions and procedures for operating local gold panning sites
12. Types of relationship between gold miners and local populations	Types of relations with local populations Have there been any conflicts between gold miners and local populations, and if so, what were the causes? Have there been any conflicts between gold miners and the administration/commune, and if so, what were the causes?
13. Closing the interview	Do you have anything to add that we haven't mentioned? Thanks

.

Authors' Declarations and Essential Ethical Compliances

Authors' Contributions (in accordance with ICMJE criteria for authorship)

Contribution	*Author 1*	*Author 2*	*Author 3*
Conceived and designed the research or analysis	No	Yes	No
Collected the data	No	Yes	Yes
Contributed to data analysis & interpretation	Yes	Yes	No
Wrote the article/paper	Yes	Yes	Yes
Critical revision of the article/paper	Yes	No	No
Editing of the article/paper	Yes	No	No
Supervision	Yes	No	Yes
Project Administration	No	Yes	Yes
Funding Acquisition	No	No	No
Overall Contribution Proportion (%)	40	30	30

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Research involving human bodies or organs or tissues (Helsinki Declaration)
The author(s) solemnly declare(s) that this research has not involved any human subject (body or organs) for experimentation. It was not clinical research. The contexts of human population/participation were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of Helsinki Declaration does not apply in cases of this study or written work.

Research involving animals (ARRIVE Checklist)
The author(s) solemnly declare(s) that this research has not involved any animal subject (body or organs) for experimentation. The research was not based on laboratory experiment involving any kind animal. The contexts of animals were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of ARRIVE does not apply in cases of this study or written work.

Research on Indigenous Peoples and/or Traditional Knowledge
The author(s) solemnly declare(s) that this research has involved Indigenous Peoples as participants or respondents. The contexts of Indigenous Peoples or Indigenous Knowledge were only indirectly covered through literature review. Therefore, a prior informed consent (PIC) of the respondents or Self-Declaration in this regard applies in cases of this study or written work, and a copy of the same is appended.

Research involving Plants
The author(s) solemnly declare(s) that this research has not involved the plants for experiment and field studies. Some contexts of plants are also indirectly covered through literature review. Thus, during this research the author(s) obeyed the principles of the Convention on Biological Diversity and the Convention on the Trade in Endangered Species of Wild Fauna and Flora.

Research Involving Local Community Participants (Non-Indigenous) or Children
The author(s) solemnly declare(s) that this research has directly involved local community participants or respondents belonging to non-Indigenous peoples. But this study involved no child in any form directly. The contexts of different humans, people, populations, men/women/children and ethnic people were only indirectly covered through literature review. Therefore, a prior informed consent (PIC) of the respondents or Self-Declaration in this regard applies in cases of this study or written work, and a copy of the same is appended.

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)
The author(s) has/have NOT complied with PRISMA standards. It is not relevant in case of this study or written work.

Competing Interests/Conflict of Interest
Author(s) has/have no competing financial, professional, or personal interests from other parties or in publishing this manuscript. There is no conflict of interest with the publisher or the editorial team or the reviewers.

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During the preparation of this work, the authors used no AI to assists the script translation and proof reading. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

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To see original copy of these declarations signed by Corresponding/First Author (on behalf of other co-authors too), please download associated zip folder [Declarations] from the published Abstract page accessible through and linked with the DOI: https://doi.org/10.33002/nr2581.6853.080204.

SELF-DECLARATION FORM

Research on Indigenous Peoples and/or Traditional Knowledge

1. Conditions of the Research

1.1 Was or will the research (be) conducted on (an) Indigenous land, including reserve, settlement, and land governed under a self-government rule/agreement or?

No

1.2 Did/does any of the criteria for participation include membership in an Indigenous community, group of communities, or organization, including urban Indigenous populations?

No

1.3 Did/does the research seek inputs from participants (members of the Indigenous community) regarding a community's cultural heritage, artifacts, traditional knowledge, biocultural or biological resources or unique characteristics/practices?

No

1.4 Did/will Aboriginal identity or membership in an Indigenous community used or be used as a variable for the purposes of analysis?

No

2. Community Engagement

2.1 If you answered "Yes" to questions 1.1, 1.2, 1.3 or 1.4, have you initiated or do you intend to initiate an engagement process with the Indigenous collective, community or communities for this study?

No Applicable

2.2 If you answered "Yes" to question 2.1, describe the process that you have followed or will follow with to community engagement. Include any documentation of consultations (*i.e., formal research agreement, letter of approval, PIC, email communications, etc*.) and the role or position of those consulted, including their names if appropriate:

Not Applicable.

3. No Community Consultation or Engagement

If you answered "No" to question 2.1, briefly describe why community engagement will not be sought and how you can conduct a study that respects Aboriginal/ Indigenous communities and participants in the absence of community engagement.

The present study titled: "Migration and Gold Panning: Collaboration between Indigenous and Non-indigenous People in Artisanal Mining in Gaoua, Burkina Faso", involves community participation. However, the participants in this study do not belong to any indigenous community officially classified and identified as a 'registered tribe' by the Ministry of Culture, Arts and Tourism of Burkina Faso.

- Name of Principal Researcher: Abdoulaye Sawadogo
- Affiliation of Principal Researcher: Lecturer and researcher, Department of Sociology, Joseph Ki-Zerbo University, Address: 03 BP 7021, Ouagadougou, Burkina Faso.

Signature:

Declaration: Submitting this note by email to any journal published by The Grassroots Institute is your confirmation that the information declared above is correct and devoid of any manipulation.

INFORMATION AND CONSENT FORM FROM RESPONDENTS
(Non-Indigenous Respondents)

This form was translated into local language for the respondents

Title of the Research: Migration and Gold Panning: Collaboration between Indigenous and Non-indigenous People in Artisanal Mining in Gaoua, Burkina Faso

Principal Researcher:	Abdoulaye Sawadogo Lecturer and researcher, Department of Sociology, Joseph Ki-Zerbo University, Address: 03 BP 7021, Ouagadougou, Burkina Faso
Research Supervisor:	Oumar Sangaré Doctor, Department of Sociology, Joseph Ki-Zerbo University, Address: 03 BP 7021, Ouagadougou, Burkina Faso Alexis Kaboré Lecturer and researcher, Department of Sociology, Joseph Ki-Zerbo University, Address: 03 BP 7021, Ouagadougou Burkina Faso

A) INFORMATION TO PARTICIPANTS

1. Objectives of the research

The objectives of this study were to analyse the transformative effects of migration flows towards gold mining sites in the municipality of Gaoua in Burkina Faso through the new forms of relationships emerging between indigenous and non-indigenous people.

2. Participation in research

The researcher will ask you several pertinent questions. This interview will be recorded in written form and should last about 50-60 minutes. The location and timing of the interview will be determined by you, depending on your availability and convenience.

3. Risks and disadvantages

There is no particular risk involved in this project. You may, however, refuse to answer any question at any time or even terminate the interview.

4. Advantanges and benefits

You will receive intangible benefits even if you refuse to answer some questions or decide to terminate the interview. You will also contribute to a better understanding of the migration phenomenon linked to gold mining in the municipality of Gaoua in Burkina Faso.

5. Confidentiality

Personal information you give us will be kept confidential. No information identifying you in any way will be published. In addition, each participant in the research will be assigned a code and only the researcher will know your identity.

6. Right of withdrawal

Your participation in this project is entirely voluntary and you can at any time withdraw from the research on simple verbal notice and without having to justify your decision, without consequence to you. If you decide to opt out of the research, please contact the researcher at the telephone number or email listed below. At your request, all information concerning you can also be destroyed. However, after the outbreak of the publishing process, it is impossible to destroy the analyses and results on the data collected.

B) CONSENT

Declaration of the participant

- ⇨ I understand that I can take some time to think before agreeing or not to participate in the research.
- ⇨ I can ask the research team questions and ask for satisfactory answers.
- ⇨ I understand that by participating in this research project, I do not relinquish any of my rights, including my right to terminate the interview at any time.
- ⇨ I have read this information and consent form and agree to participate in the research project.
- ⇨ I agree that the interviews be recorded in written form by the researcher: Yes ( ) No ( )

Signature of the participant : _____ Date : _____

Surname : _____ First name : _____

Researcher engagement

I explained to the participant the conditions for participation in the research project. I answered to the best of my knowledge the questions asked and I made sure of the participant's understanding. I, along with the research team, agree to abide by what was agreed to in this information and consent form.

Signature of the researcher : Date : 22-08-2024

Surname: Sawadogo First name: Abdoulaye

- ⇨ Should you have any questions regarding this study, or to withdraw from the research, please contact Mr. Abdoulaye Sawadogo by e-mail abdoulaye.sawadogo@ujkz.bf.

- ⇨ If you have any concerns about your rights or about the responsibilities of researchers concerning your participation in this project, you can contact the of Oumar Sangaré in Department Sociology, Joseph Ki-Zerbo University, Burkina Faso. Email: sangaromar@yahoo.fr